Test Type: 14-DAY Route: GAVAGE

C Number:

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture CAS Number: 76231-76-0

Lab: MBA

C99037

**Lock Date:** 01/24/2002

**Cage Range:** ΑII

**Date Range:** ΑII

**Reasons For Removal:** ΑII

**Removal Date Range:** ΑII

**Treatment Groups:** ΑII

**Study Gender:** Both

**PWG Approval Date NONE** 

Date Report Requested: 10/22/2014 Time Report Requested: 20:58:10

First Dose M/F: NA / NA

Test Type: 14-DAY

**Alimentary System** 

Route: GAVAGE

# P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

First Dose M/F: NA / NA Lab: MBA

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:10

F 344/N Rat Male **VEHICLE CONTROL** 

Species/Strain: Rat/F 344/N

DAY ON TEST	0	0	0	0	0
	U	U	U	U	U
	1	1	1	1	1
	7	7	7	7	7
ANIMAL ID	0	0	0	0	0
AMIMAL ID	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	1	2	3	4	5

\*TOTALS

5 5

5

, ,									
Esophagus	+	+	+	+	+	5			
Intestine Large, Cecum	+	+	+	+	+	5			
Intestine Large, Colon	+	+	+	+	+	5			
Intestine Large, Rectum	+	+	+	+	+	5			
Intestine Small, Duodenum	+	+	+	+	+	5			
Intestine Small, Ileum	+	+	+	+	+	5			
Intestine Small, Jejunum	+	+	+	+	+	5			
Liver	+	+	+	+	+	5			
Centrilobular, Vacuolization Cytoplasmic			1	1			2	1.0	
Pancreas	+	+	+	+	+	5			
Salivary Glands	+	+	+	+	+	5			
Stomach, Forestomach	+	+	+	+	+	5			
Stomach, Glandular	+	+	+	+	+	5			
Cardiovascular System									

**Blood Vessel** 

**Endocrine System Adrenal Cortex** 

> Adrenal Medulla Islets, Pancreatic

Heart

M .. Missing tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup> Tissue examined microscopically

A .. Autolysis precludes evaluation

X ..Lesion present I .. Insufficient tissue

Test Type: 14-DAY

# P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

Route: GAVAGE Species/Strain: Rat/F 344/N CAS Number: 76231-76-0

Time Report Requested: 20:58:10

Date Report Requested: 10/22/2014

First Dose M/F: NA / NA

Lab: MBA

F 344/N Rat Male VEHICLE CONTROL	DAY ON TEST  ANIMAL ID	0 0 1 7 0 0 0 0	0 0 1 7 0 0 0 0 0 2	0 0 1 7 0 0 0 0 0 3	0 0 1 7 0 0 0 0 4	0 0 1 7 0 0 0 0 5	*TOTALS
Parathyroid Gland		+	+	+	+	+	5
Pituitary Gland		+	+	+	+	+	5
Thyroid Gland		+	+	+	+	+	5
General Body System							
NONE							
Genital System							
Epididymis		+	+	+	+	+	5
Preputial Gland		+	+	+	+	+	5
Prostate		+	+	+	+	+	5
Seminal Vesicle		+	+	M	+	+	4
Testes		+	+	+	+	+	5
Hematopoietic System							
Bone Marrow		+	+	+	+	+	5
Lymph Node, Mandibular		М	М	М	M	М	0
Lymph Node, Mesenteric		+	+	+	+	+	5
Spleen		+	+	+	+	+	5
Thymus		+	+	+	+	+	5
Integumentary System							
Mammary Gland		М	М	+	+	+	3
Skin		+	+	+	+	+	5

M ..Missing tissue

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK ..Not examined microscopically

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup>Tissue examined microscopically

X ..Lesion present

<sup>1-4 ..</sup>Lesion qualified as:

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

**CAS Number:** 76231-76-0

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

	DAY ON TEST	0	0	0	0	0			
F 344/N Rat Male		0 1	0	0 1	0	0 1			
VEHICLE CONTROL		7	7	7	7	7			
	ANIMAL ID	0	0	0	0	0			
		0	0	0	0	0			
		0 1	0	0 3	0	0 5	*TC	)TA	LS
Musculoskeletal System							_		
Bone		+	+	+	+	+	5		
Skeletal Muscle		+	+	+	+	+	5		
Nervous System									
Brain, NOS		+	+	+	+	+	5		
Peripheral Nerve, Sciatic		+	+	+	+	+	5		
Spinal Cord, Cervical		+	+	+	+	+	5		
Spinal Cord, Lumbar		+	+	+	+	+	5		
Respiratory System									
Larynx		+	+	I	I	+	3		
Lung		+	+	+	+	+	5		
Perivascular, Infiltration Cel	lular, Lymphocyte					1		1	1.0
Nose		+	+	+	+	+	5		
Trachea		+	+	+	+	+	5		
Special Senses System									
Eye		+	+	+	+	+	5		
Harderian Gland		+	+	+	+	+	5		
Urinary System									
Kidney		+	+	+	+	+	5		
Urinary Bladder		+	+	+	+	+	5		

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:10

First Dose M/F: NA / NA

 $<sup>^{\</sup>star}\,$  .. Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup>Tissue examined microscopically

X ..Lesion present

I .. Insufficient tissue

Experiment Number: 99037-01 P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

**CAS Number:** 76231-76-0

Species/Strain: Rat/F 344/N

DAY ON TEST

F 344/N Rat Male 1.0 MG/KG

Test Type: 14-DAY

Route: GAVAGE

ANIMAL ID

\*TOTALS

**Alimentary System** 

NONE

Cardiovascular System

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

NONE

Musculoskeletal System

NONE

**Nervous System** 

NONE

+ .. Tissue examined microscopically

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:10

First Dose M/F: NA / NA

Lab: MBA

2) Mild 4) Marked

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Route: GAVAGE

Test Type: 14-DAY

Species/Strain: Rat/F 344/N

DAY ON TEST

F 344/N Rat Male MG/KG

ANIMAL ID

\*TOTALS

**Respiratory System** 

NONE

**Special Senses System** 

NONE

**Urinary System** 

NONE

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:10

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup> Tissue examined microscopically

Experiment Number: 99037-01 P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Type: 14-DAY

Test Compound: alpha/beta Thujone mixture

Route: GAVAGE CAS Number: 76231-76-0

Species/Strain: Rat/F 344/N

DAY ON TEST

F 344/N Rat Male 3.0 MG/KG

ANIMAL ID

\*TOTALS

**Alimentary System** 

NONE

Cardiovascular System

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

NONE

Musculoskeletal System

NONE

**Nervous System** 

NONE

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:10

First Dose M/F: NA / NA

Lab: MBA

2) Mild 4) Marked

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup> Tissue examined microscopically

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

DAY ON TEST

F 344/N Rat Male MG/KG

ANIMAL ID

\*TOTALS

**Respiratory System** 

NONE

**Special Senses System** 

NONE

**Urinary System** 

NONE

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:10

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup> Tissue examined microscopically

#### P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Date Report Requested: 10/22/2014
Time Report Requested: 20:58:10

First Dose M/F: NA / NA

Lab: MBA

Test Type: 14-DAY

Route: GAVAGE

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Species/Strain: Rat/F 344/N

F 344/	N Rat Male	•
10.0	MG/KG	

DAY ON TEST	0	0	0	0	0	
	0	0	0	0	0	
	1	1	1	1	1	
	7	7	7	7	7	
V VIIIVAVI ID	0	0	0	0	0	
ANIMAL ID	0	0	0	0	0	
	0	0	0	0	0	
	3	3	3	3	3	
	1	2	3	4	5	*TOTALS

Alimentary System

Liver + 1
Hepatodiaphragmatic Nodule X

**Cardiovascular System** 

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

NONE

**Musculoskeletal System** 

NONE

**Nervous System** 

+ .. Tissue examined microscopically

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I ..Insufficient tissue

BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

**CAS Number:** 76231-76-0

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

s1-76-0 First Dose M/F: NA / NA

Lab: MBA

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:10

F 344/N Rat Male 10.0 MG/KG

DAY ON TEST	0	0	0	0	0
	1 7	<i>1</i> 7	<i>1</i> 7	1 7	1 7
ANIMAL ID	000	0 0	0 0	000	0 0 0
	3 1	3	3	3 4	3 5

\*TOTALS

NONE

**Respiratory System** 

NONE

**Special Senses System** 

NONE

**Urinary System** 

NONE

M ..Missing tissue

X ..Lesion presentI ..Insufficient tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup> Tissue examined microscopically

**Experiment Number: 99037-01** P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

DAY ON TEST

F 344/N Rat Male 30.0 MG/KG

ANIMAL ID

\*TOTALS

**Alimentary System** 

NONE

Cardiovascular System

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

NONE

Musculoskeletal System

NONE

**Nervous System** 

NONE

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present I .. Insufficient tissue

A .. Autolysis precludes evaluation BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:10

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

DAY ON TEST

F 344/N Rat Male 30.0 MG/KG

ANIMAL ID

\*TOTALS

**Respiratory System** 

NONE

**Special Senses System** 

NONE

**Urinary System** 

NONE

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:10

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup> Tissue examined microscopically

# P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Time Report Requested: 20:58:10 First Dose M/F: NA / NA

Date Report Requested: 10/22/2014

Lab: MBA

F 344	/N Rat Male
100	MG/KG

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

DAY ON TEST	0 0 1	0 0 1	0 0 1	0 0 1	0 0 1	
ANIMAL ID	0	0	0	0	0	
	0 5 1	0 5 2	0 5 3	0 5 4	0 5 5	

\*TOTALS

Alii	menta	ry :	Syst	em
------	-------	------	------	----

Esophagus

Loophagao	•	•	•	•	•	U			
Intestine Large, Cecum	+	+	+	+	+	5			
Intestine Large, Colon	+	+	+	+	+	5			
Intestine Large, Rectum	+	+	+	+	+	5			
Intestine Small, Duodenum	+	+	+	+	+	5			
Intestine Small, Ileum	+	+	+	+	+	5			
Intestine Small, Jejunum	+	+	+	+	+	5			
Liver	+	+	+	+	+	5			
Centrilobular, Vacuolization Cytoplasmic		1					1	1.0	
Pancreas	+	+	+	+	+	5			
Salivary Glands	+	+	+	+	+	5			
Stomach, Forestomach	+	+	+	+	+	5			
Stomach, Glandular	+	+	+	+	+	5			
Cardiovascular System									
Blood Vessel	+	+	+	+	+	5			
Heart	+	+	+	+	+	5			
Endocrine System									
Adrenal Cortex	+	+	+	+	+	5			
Adrenal Medulla	+	+	+	+	+	5			
Islets, Pancreatic	+	+	+	+	+	5			

M .. Missing tissue

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup>Tissue examined microscopically

X ..Lesion present

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

**CAS Number:** 76231-76-0

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

F 344/N Rat Male 100 MG/KG	DAY ON TEST	0 0 1 7 0 0 0 5	0 0 1 7 0 0 0 0 5	0 0 1 7 0 0 0 0 5	0 0 1 0 0 0 0 5	0 0 1 7 0 0 0 0 5	
		1	2	3	4	5	*TOTALS
Parathyroid Gland		M	+	+	М	+	3
Pituitary Gland		+	+	+	+	+	5
Thyroid Gland		+	+	+	+	+	5
General Body System							
NONE							
Genital System							
Epididymis		+	+	+	+	+	5
Preputial Gland		+	+	+	+	+	5
Prostate		+	+	+	+	+	5
Seminal Vesicle		М	+	+	+	+	4
Testes		+	+	+	+	+	5
Hematopoietic System							
Bone Marrow		+	+	+	+	+	5
Lymph Node, Mandibular		М	M	M	M	M	0
Lymph Node, Mesenteric		+	+	+	+	+	5
Spleen		+	+	+	+	+	5
Thymus		+	+	+	+	+	5
Integumentary System							
Mammary Gland		+	М	М	+	М	2
Skin		+	+	+	+	+	5

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically I .. Insufficient tissue

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:11

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup>Tissue examined microscopically

X ..Lesion present

## P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

**CAS Number:** 76231-76-0

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

F 344/N Rat Male	DAY ON TEST	0	0	0	0	0			
100 MG/KG		<i>1 7</i>	<i>1 7</i>	<i>1 7</i>	1 0	<i>1 7</i>			
ine/ite	ANIMAL ID	0 0 0 5	0005	0 0 0 5	0005	0005			
		1	2	3	4	5	*TC	)TA	LS_
Musculoskeletal System									
Bone		+	+	+	+	+	5		
Skeletal Muscle		+	+	+	+	+	5		
Nervous System									
Brain, NOS		+	+	+	+	+	5		
Peripheral Nerve, Sciatic		+	+	+	+	+	5		
Spinal Cord, Cervical		+	+	+	+	+	5		
Spinal Cord, Lumbar		+	+	+	+	+	5		
Respiratory System									
Larynx		+	+	+	1	1	3		
Lung		+	+	+	+	+	5		
Perivascular, Infiltration Cel	lular, Lymphocyte			1	1			2	1.0
Nose		+	+	+	Α	+	4		
Trachea		+	+	+	+	+	5		
Special Senses System									
Eye		+	+	+	+	+	5		
Harderian Gland		+	+	+	+	+	5		
Urinary System									
Kidney		+	+	+	+	+	5		
Urinary Bladder		+	+	+	+	+	5		

M ..Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:11

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup>Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

Test Type: 14-DAY

Route: GAVAGE

Species/Strain: Rat/F 344/N

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Date Report Requested: 10/22/2014 Time Report Requested: 20:58:11

First Dose M/F: NA / NA

Lab: MBA

\*\*\*END OF MALE DATA\*\*\*

X ..Lesion present

A .. Autolysis precludes evaluation

I ..Insufficient tissue

BLANK .. Not examined microscopically

M .. Missing tissue

1) Minimal 3) Moderate 2) Mild

1-4 ..Lesion qualified as:

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup>Tissue examined microscopically

#### P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

Lab: MBA

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:11

First Dose M/F: NA / NA

F 344/N Rat Female	DAY ON TEST	0 0 1 7	0 0 1 7	0 0 1 7	0 0 1 7	0 0 1 7	
VEHICLE CONTROL	ANIMAL ID		0 0 0 0 0 7	0 0 0 0 0 8	0 0 0 0 9	0 0 0 1 0	*TOTALS
Alimentary System			•	•	•		
Esophagus		+	+	+	+	+	5
Intestine Large, Cecum		+	+	+	+	+	5
Intestine Large, Colon		+	+	+	+	+	5
Intestine Large, Rectum		+	+	+	+	+	5
Intestine Small, Duodenum		+	+	+	+	+	5
Intestine Small, Ileum		+	+	+	+	+	5
Intestine Small, Jejunum		+	+	+	+	+	5
Liver		+	+	+	+	+	5
Pancreas		+	+	+	+	+	5
Salivary Glands		+	+	+	+	+	5
Stomach, Forestomach		+	+	+	+	+	5
Stomach, Glandular		+	+	+	+	+	5
Cardiovascular System							
Blood Vessel		+	+	+	+	+	5
Heart		+	+	+	+	+	5
Endocrine System							
Adrenal Cortex		+	+	+	+	+	5
Adrenal Medulla		+	+	+	+	+	5
Islets, Pancreatic		+	+	+	+	+	5
Parathyroid Gland		+	+	М	+	М	3

A .. Autolysis precludes evaluation

M .. Missing tissue

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup>Tissue examined microscopically

X ..Lesion present

#### P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

DAY ON TEST 0 0 0 0 0 0 F 344/N Rat Female *1 7 1 7 1 7 1 7 1 7* **VEHICLE CONTROL** 0 0 0 0 0 ANIMAL ID Õ 0 0 0 0 0 0 0 0 6 0 7 Ō 0 9 1 \*TOTALS 8 Pituitary Gland 5 Thyroid Gland 5 **General Body System** NONE **Genital System** Clitoral Gland 5 Ovary 5 Uterus 5 Hydrometra 1 1 1.0 **Hematopoietic System** Bone Marrow Lymph Node, Mandibular 0 Lymph Node, Mesenteric 5 Spleen 5 5 **Thymus Integumentary System** Mammary Gland 5 Skin 5 Musculoskeletal System

M .. Missing tissue

5

Bone

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:11

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup> Tissue examined microscopically

X ..Lesion present

I ..Insufficient tissue

Test Type: 14-DAY

Route: GAVAGE

#### P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

First Dose M/F: NA / NA

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:11

Lab: MBA

F 344/N Rat Female
<b>VEHICLE CONTROL</b>

Species/Strain: Rat/F 344/N

	DAY ON TEST	0	0	0	0	0				
F 344/N Rat Female		0 1	0 1	0	0	0 1				
VEHICLE CONTROL		7	7	7	7	7				
72022	ANIMAL ID	0	0	0	0	0				
	7 (( VIIV) ( L 1 L	0	0	0	0	0				
		0	0	0	0	1	*T/	\ <b>T</b> ^		
Observation Manager		6	7	8	9	0	*TC	) I A	LS	
Skeletal Muscle		+	+	+	+	+	5			
Nervous System										
Brain, NOS		+	+	+	+	+	5			
Peripheral Nerve, Sciatic		+	+	+	+	+	5			
Spinal Cord, Cervical		+	+	+	+	+	5			
Spinal Cord, Lumbar		+	+	+	+	+	5			
Respiratory System										
Larynx		ı	ı	ı	ı	+	1			
Lung		+	+	+	+	+	5			
Alveolus, Hemorrhage, Foc	al		1					1	1.0	
Inflammation, Chronic Activ	e, Focal		3					1	3.0	
Nose		+	+	+	+	+	5			
Trachea		+	+	+	+	+	5			
Special Senses System										
Eye		+	+	+	+	+	5			
Harderian Gland		+	+	+	+	+	5			
Urinary System										
Kidnov							E			
Kidney		+	+	+	+	+	5 5			
Urinary Bladder		+	+	+	+	+	S			

DAY ON TEST A A A A A

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup>Tissue examined microscopically

<sup>1-4 ..</sup>Lesion qualified as:

Experiment Number: 99037-01 P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Type: 14-DAY

Route: GAVAGE

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Species/Strain: Rat/F 344/N

DAY ON TEST

F 344/N Rat Female 1.0 MG/KG

ANIMAL ID

\*TOTALS

**Alimentary System** 

NONE

Cardiovascular System

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

NONE

Musculoskeletal System

NONE

**Nervous System** 

NONE

+ .. Tissue examined microscopically

M .. Missing tissue

A .. Autolysis precludes evaluation

X ..Lesion presentI ..Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:11

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Route: GAVAGE

Test Type: 14-DAY

Species/Strain: Rat/F 344/N

DAY ON TEST

F 344/N Rat Female MG/KG

ANIMAL ID

\*TOTALS

**Respiratory System** 

NONE

**Special Senses System** 

NONE

**Urinary System** 

NONE

M .. Missing tissue

X ..Lesion present

I .. Insufficient tissue

A .. Autolysis precludes evaluation BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:11

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup> Tissue examined microscopically

Experiment Number: 99037-01 P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Type: 14-DAY

Route: GAVAGE

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Species/Strain: Rat/F 344/N

DAY ON TEST

F 344/N Rat Female 3.0 MG/KG

ANIMAL ID

\*TOTALS

**Alimentary System** 

NONE

Cardiovascular System

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

NONE

Musculoskeletal System

NONE

**Nervous System** 

NONE

+ .. Tissue examined microscopically

M .. Missing tissue

A .. Autolysis precludes evaluation

X ..Lesion presentI ..Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:11

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Route: GAVAGE

Test Type: 14-DAY

Species/Strain: Rat/F 344/N

DAY ON TEST

F 344/N Rat Female MG/KG

ANIMAL ID

\*TOTALS

**Respiratory System** 

NONE

**Special Senses System** 

NONE

**Urinary System** 

NONE

M .. Missing tissue

X ..Lesion present

I .. Insufficient tissue

A .. Autolysis precludes evaluation BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:11

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup> Tissue examined microscopically

**Experiment Number: 99037-01** P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

DAY ON TEST

F 344/N Rat Female 10.0 MG/KG

ANIMAL ID

\*TOTALS

**Alimentary System** 

NONE

Cardiovascular System

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

NONE

Musculoskeletal System

NONE

**Nervous System** 

NONE

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present I .. Insufficient tissue

A .. Autolysis precludes evaluation BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:11

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

CAS Number: 76231-76-0

Route: GAVAGE Species/Strain: Rat/F 344/N

Test Type: 14-DAY

DAY ON TEST

F 344/N Rat Female 10.0 MG/KG

ANIMAL ID

\*TOTALS

**Respiratory System** 

NONE

**Special Senses System** 

NONE

**Urinary System** 

NONE

M .. Missing tissue

X ..Lesion present

I .. Insufficient tissue

A .. Autolysis precludes evaluation BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:11

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup> Tissue examined microscopically

**Experiment Number: 99037-01** P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Type: 14-DAY Test Compound: alpha/beta Thujone mixture Route: GAVAGE

CAS Number: 76231-76-0

Species/Strain: Rat/F 344/N

DAY ON TEST

F 344/N Rat Female 30.0 MG/KG

ANIMAL ID

\*TOTALS

**Alimentary System** 

NONE

Cardiovascular System

NONE

**Endocrine System** 

NONE

**General Body System** 

NONE

**Genital System** 

NONE

**Hematopoietic System** 

NONE

**Integumentary System** 

NONE

Musculoskeletal System

NONE

**Nervous System** 

NONE

+ .. Tissue examined microscopically

M .. Missing tissue

X .. Lesion present

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:11

First Dose M/F: NA / NA

Lab: MBA

4) Marked 2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

Test Compound: alpha/beta Thujone mixture

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

CAS Number: 76231-76-0

Lab: MBA

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:11

First Dose M/F: NA / NA

DAY ON TEST

F 344/N Rat Female 30.0 MG/KG

ANIMAL ID

\*TOTALS

**Respiratory System** 

NONE

**Special Senses System** 

NONE

**Urinary System** 

NONE

M .. Missing tissue

X ..Lesion present

I .. Insufficient tissue

A .. Autolysis precludes evaluation BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup> Tissue examined microscopically

# P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL Test Compound: alpha/beta Thujone mixture

**CAS Number:** 76231-76-0

Date Report Requested: 10/22/2014 Time Report Requested: 20:58:11

First Dose M/F: NA / NA

Lab: MBA

Test Type: 14-DAY Route: GAVAGE

Species/Strain: Rat/F 344/N

F 344/	N Rat Female
100	MG/KG

DAY ON TEST	0	_	_	0	•
DAY ON TEST	0	0	0	U	U
	0	0	0	0	0
	1	1	1	1	1
ANIMAL ID	7	7	7	7	7
	0	0	0	0	0
AMIMAL ID	0	0	0	0	0
	0	0	0	0	0
	5	5	5	5	6
	6	7	8	9	0

	6	7	8	9	0	*TOTALS		LS	
Alimentary System									
Esophagus	+	+	+	+	+	5			
Intestine Large, Cecum	+	+	+	+	+	5			
Intestine Large, Colon	+	+	+	+	+	5			
Intestine Large, Rectum	+	+	+	+	+	5			
Intestine Small, Duodenum	+	+	+	+	+	5			
Intestine Small, Ileum	+	+	+	+	+	5			
Intestine Small, Jejunum	+	+	+	+	+	5			
Liver	+	+	+	+	+	5			
Centrilobular, Vacuolization Cytoplasmic	1						1	1.0	
Pancreas	+	+	+	+	+	5			
Salivary Glands	+	+	+	+	+	5			
Stomach, Forestomach	+	+	+	+	+	5			
Stomach, Glandular	+	+	+	+	+	5			
Cardiovascular System									
Blood Vessel	+	+	+	+	+	5			
Heart	+	+	+	+	+	5			
Endocrine System									
Adrenal Cortex	+	+	+	+	+	5			
Adrenal Medulla	+	+	+	+	+	5			
Islets, Pancreatic	+	+	+	+	+	5			

M .. Missing tissue

A .. Autolysis precludes evaluation

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup>Tissue examined microscopically

X ..Lesion present I .. Insufficient tissue

#### P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

**Test Compound:** alpha/beta Thujone mixture

**CAS Number:** 76231-76-0

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Route: GAVAGE

F 344/N Rat Female 100 MG/KG	DAY ON TEST	0 0 1 7	0 0 1 7	0 0 1 7	0 0 1 7	0 0 1 7	
	ANIMAL ID	0 0 0 5 6	0 0 0 5 7	0 0 0 5 8	0 0 0 5 9	0 0 0 6 0	*TOTALS
Parathyroid Gland		+	М	+	+	+	4
Pituitary Gland		+	+	+	+	+	5
Thyroid Gland  General Body System		+	+	+	+	+	5
NONE Genital System							
Clitoral Gland		+	+	+	+	+	5
Ovary		+	+	+	+	+	5
Uterus		+	+	+	+	+	5
Hematopoietic System							
Bone Marrow		+	+	+	+	+	5
Lymph Node, Mandibular		М	М	М	М	М	0
Lymph Node, Mesenteric		+	+	+	+	+	5
Spleen		+	+	+	+	+	5
Thymus		+	+	+	+	+	5
Integumentary System							
Mammary Gland		+	+	+	+	+	5
Skin		+	+	+	+	+	5
Musculoskeletal System							
Bone		+	+	+	+	+	5

M .. Missing tissue

X ..Lesion present

A .. Autolysis precludes evaluation

I ..Insufficient tissue BLANK ..Not examined microscopically

1-4 ..Lesion qualified as:1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:11

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup>Tissue examined microscopically

P09: NON-NEOPLASTIC LESIONS BY INDIVIDUAL ANIMAL

**Test Compound:** alpha/beta Thujone mixture

CAS Number: 76231-76-0

Species/Strain: Rat/F 344/N

Test Type: 14-DAY

Skeletal Muscle **Nervous System** Brain, NOS

**Special Senses System** 

Harderian Gland **Urinary System** 

Urinary Bladder

Route: GAVAGE

F 344/N Rat Female MG/KG

Peripheral Nerve, Sciatic Spinal Cord, Cervical Spinal Cord, Lumbar **Respiratory System** 

ooloo, ou alli i kayi o i iii k										
344/N Rat Female 00 MG/KG	DAY ON TEST	0 0 1 7 0 0 0 5 6	0 0 1 7 0 0 0 5 7	0 0 1 7 0 0 0 5 8	0 0 1 7 0 0 0 5 9	0 0 1 7 0 0 0 6 0	*TO	ΤΔ	18	
Skeletal Muscle ervous System		+	+	+	+	+	5	171		
Brain, NOS Peripheral Nerve, Sciatic Spinal Cord, Cervical Spinal Cord, Lumbar espiratory System		+ + + +	+ + + +	+ + + +	+ + + +	+ + + +	5 5 5			
Larynx Lung Alveolus, Hemorrhage, Foca Nose Trachea pecial Senses System	al	+ + 1 + +	+ + + +	+ + + +	+ + + +	+++	4 5 5 5	1	1.0	
Eye Harderian Gland inary System		+	+	+	+	+	5 5			
Kidney		+	+	+	+	+	5			

\*\* END OF REPORT \*\*

M .. Missing tissue

X .. Lesion present

A .. Autolysis precludes evaluation

I .. Insufficient tissue

BLANK .. Not examined microscopically

1-4 ..Lesion qualified as:

1) Minimal 3) Moderate

2) Mild

4) Marked

Date Report Requested: 10/22/2014

Time Report Requested: 20:58:11

First Dose M/F: NA / NA

<sup>\* ..</sup>Total animals with tissue examined microscopically; Total animals with lesion and mean severity grade

<sup>+ ..</sup> Tissue examined microscopically